

**Session Program**

**17-24 Jul 2024**

**ICHEP 2024**

***Neutrino Physics***

Prague

# Thursday 18 July

08:30

## Neutrino Physics: Oscillations

Session | Location: Panorama | Convener: Viktor Pec

08:30–08:45 **Latest oscillation results from Daya Bay**

**Speaker**

Jinjing Li

08:45–09:00

**New results of reactor antineutrino oscillation amplitude and frequency using 3800 days of RENO data**

**Speaker**

Sanghoon Jeon

09:00–09:15

**Reactor flux and spectrum measurement with the Daya Bay full data set**

**Speaker**

Mr Jinhao Huang

09:15–09:30 **Recent results from the DANSS experiment**

**Speaker**

Mark Shirchenko

09:30–09:45 **ICARUS at the Short-Baseline Neutrino program: first results**

**Speaker**

Lea Di Noto

09:45–10:00

**Latest results from MicroBoONE's Low Energy Excess Search and Constraints on eV-Scale Sterile Neutrino Oscillations**

**Speaker**

Miquel Nebot-Guinot

10:00–10:15 **Status of the Short-Baseline Near Detector at Fermilab**

**Speaker**

Rodrigo Alvarez-Garrote

10:15

10:45

## Neutrino Physics: Oscillations

Session | Location: Panorama | Convener: Viktor Pec

10:45–11:00 **Measurement of the Solar pp Neutrino Flux in PandaX-4T**

**Speaker**

Xiaoying Lu

11:00–11:15 **T2K Neutrino Oscillation Analysis**

**Speaker**

Denis CARABADJAC

11:15-11:30

**Neutrino Oscillation Analysis with Combined Data from Super-Kamiokande and T2K****Speaker**

Jianrun HU

11:30-11:45

**A New Measurement of Neutrino Oscillations at NOvA****Speaker**

Kathryn Sutton

11:45-12:00

**T2K+NOvA Joint Measurement of Neutrino Oscillation Parameters****Speaker**

Tomas Nosek

12:00-12:15

**Tau neutrino appearance and the measurement of the neutrino mass-ordering at Super-Kamiokande****Speaker**

Maitrayee Mandal

12:15-12:30

**Neutrino oscillation physics in JUNO****Speaker**

Steven Calvez

12:30

14:30

**Neutrino Physics: Oscillations and Interactions****Session** | **Location:** Panorama | **Convener:** Tomas Nosek

14:30-14:45

**The Deep Underground Neutrino Experiment (DUNE) Program****Speaker**

Ines Gil Botella

14:45-15:00

**The IceCube Upgrade: status and prospects for new advances with GeV neutrinos****Speaker**

Nora Feigl

15:00-15:15

**Exploring tau neutrino appearance measurements in KM3NeT/ORCA****Speaker**

Dr Chiara F Lastoria

15:15-15:30

**Measurement of atmospheric neutrino oscillations with KM3NeT/ORCA****Speaker**

Alfonso Lazo Pedrajas

15:30-15:45

**Enhanced search for CP violation in leptons with the new intermediate water cherenkov detector and improved J-PARC neutrino beam in the Hyper-Kamiokande Experiment.****Speaker**

Takeshi Nakadaira

15:45-16:00 **Low- $\nu$ : a tale of two energies**

**Speaker**

Callum David Wilkinson

16:00-16:15

**Quasielastic Lepton-Nucleus Scattering and the Correlated Fermi Gas Model**

**Speaker**

Prof. Gil Paz

16:15

16:45

## Neutrino Physics: Interactions

**Session** | **Location:** Panorama | **Convener:** Callum David Wilkinson

16:45-17:00 **MicroBooNE Electron-Neutrino Cross-Section Results**

**Speaker**

Marina Guzzo

17:00-17:15

**MicroBooNE cross section results from muon neutrino inclusive and pionless channels**

**Speaker**

Richard Diurba

17:15-17:30

**MicroBooNE cross section results from muon neutrinos with pions in the final state and rare processes**

**Speaker**

Michael Kirby

17:30-17:45

**Triple Differential Muon Antineutrino Charge Current Inclusive Cross Section Measurement in NOvA**

**Speaker**

Prabhjot Singh

17:45-18:00 **Neutrino cross-section results from T2K**

**Speaker**

Daniel Cherdack

18:00-18:15

**Status of Measuring Cross Sections of Hadrons on Argon with ProtoDUNE-SP**

**Speaker**

Jingyuan Shi

18:15-18:30 **Results from TeV Neutrinos at the FASER Experiment**

**Speaker**

Sergey Dmitrievsky

18:30

## Friday 19 July

08:30

### Neutrino Physics: Interactions

**Session** | **Location:** Panorama | **Convener:** Juan Pedro Ochoa Ricoux

08:30–08:45

#### Study of proton-nucleus interactions with the DsTau/NA65 experiment at the CERN-SPS

**Speaker**

Dr Akitaka Ariga

08:45–09:00

#### Hadron Production Measurements at NA61/SHINE for Neutrino Oscillation Experiments

**Speaker**

Kyle Allison

09:00–09:15

#### The Pioneering Contributions of the ANNIE Experiment at Fermilab

**Speaker**

Marvin Ascencio Sosa

09:15–09:30

#### NuMI @ ICARUS: Flux, Cross Section, and BSM Physics

**Speaker**

Daniel Cherdack

09:30–09:45

#### The CONUS+ experiment

**Speaker**

Christian Buck

09:45–10:00

#### New results on searches for CEvNS and Physics beyond the Standard Model using Skipper-CCDs at CONNIE

**Speaker**

Irina Nasteva

10:00–10:15

#### Probing Physics within and beyond the Standard Model with coherent neutrino nucleus elastic scattering at the Kuo-Sheng Reactor Neutrino Laboratory with the TEXONO Experiment

**Speaker**

Dr Manoj Kumar Singh

10:15

10:45

### Neutrino Physics: Neutrino Mass

**Session** | **Location:** Panorama | **Convener:** Rhiannon Susan Jones

10:45–11:00

#### Search for neutrinoless double beta decay with the NEXT experiment

**Speaker**

Brais Palmeiro

11:00-11:15

**Towards the AMoRE II Experiment: Neutrinoless double-beta decay search with 100 kg of 100Mo****Speaker**

Wootae Kim

11:15-11:30

**Searching for neutrinoless double-beta decay with CUPID****Speaker**

Mr Vladyslav Berest

11:30-11:45

**Status of the SuperNEMO Demonstrator and Analysis of First Data****Speaker**

Xalbat Aguerre

11:45-12:00

**R2D2: a xenon TPC for neutrinoless double beta decay search****Speaker**

Anselmo Mereaglia

12:00-12:15

**LEGEND-200: first steps towards the hunt for  $0\nu\beta\beta$** **Speaker**

Mariia Redchuk

12:15-12:30

**Beyond the N1-dominated leptogenesis with the smallest modular finite group****Speaker**

Simone Marciano

12:30

14:30

**Neutrino Physics: Mass + Astro + SND@LHC**

Session | Location: Panorama | Convener: Viktor Pec

14:30-14:45

**Latest results from the CUORE experiment****Speaker**

Alice Campani

14:45-15:00

**Probing the effective electron anti-neutrino mass with KATRIN****Speaker**

Christoph Wiesinger

15:00-15:15

**Tackling the experimental challenge to detect relic neutrinos from the Big Bang with Ptolemy****Speaker**

Dr Federico Virzi

15:15-15:30

**Astrophysical neutrino search in KamLAND****Speaker**

Mr Minori Eizuka

15:30-15:45

**The Pierre Auger Observatory - Overview of ultra-high-energy neutrino searches****Speaker**

Denise Boncioli

15:45-16:00 **Recent results from the SND@LHC experiment**

**Speaker**

Riddhi Biswas

16:15

16:45

## Neutrino Physics: Detection

**Session** | **Location:** Panorama | **Convener:** Rhiannon Susan Jones

16:45-17:00 **Decipher the Quantum Behavior of Neutrinos with DUNE PRISM**

**Speaker**

Cristovao Vilela

17:00-17:15 **MicroBooNE Detector Physics Measurements and Calibrations**

**Speaker**

Vincent Basque

17:15-17:30 **Advancements in LArTPC event reconstruction on MicroBooNE data**

**Speaker**

Maria Brigida Brunetti

17:30-17:45 **Triggering First SBND Events**

**Speaker**

Tereza Kroupova

17:45-18:00 **The ND280 upgrade of the T2K Experiment**

**Speaker**

Shivam Ashish Joshi

18:00-18:15 **Deep Learning Event Reconstruction at NOvA**

**Speaker**

Wenjie Wu

18:15-18:30 **Status of JUNO's Taishan Antineutrino Observatory**

**Speaker**

Dr Ruhui Li

18:30

# Saturday 20 July

08:30

## Neutrino Physics: Theory and Pheno

Session | Location: Panorama | Convener: Dr Antonio Enrique Cárcamo Hernández

08:30–08:45 **Multi-Messengers Neutrino Scattering on Ultra-Relativistic CνB**

**Speaker**

Maria Petropavlova

08:45–09:00

**Synergistic effects in enhancing octant and mass ordering sensitivity in the presence of a sterile neutrinos**

**Speaker**

Mr Supriya Pan

09:00–09:15

**Novel Aspects of Neutrino oscillations**

**Speaker**

Prof. Fedor Simkovic

09:15–09:30

**Dynamical scoto-seesaw mechanism with gauged B-L symmetry**

**Speaker**

Soumya Sadhukhan

09:30–09:45

**Phenomenology of Scotogenic 3-loop Neutrino Mass Models**

**Speaker**

Tessio de Melo

09:45–10:00

**Simplified models of  $d=7$  lepton number violation**

**Speaker**

Kare Fridell

10:15

10:45

## Neutrino Physics: Theory and Pheno and BSM

Session | Location: Panorama | Convener: Dr Antonio Enrique Cárcamo Hernández

10:45–11:00

**How is CP violation in thermal leptogenesis connected to CP violation in neutrino oscillations?**

**Speaker**

Zhi-zhong Xing

11:00–11:15

**Impact of mixed scattering processes on leptogenesis within hybrid seesaw framework**

**Speaker**

Tirtha Sankar Ray

11:15–11:30

**Neutrino Masses from a Hybrid Type I + III Inverse Seesaw Mechanism in  $U(1)_{R-L}$ -symmetric MSSM**

**Speaker**  
Cem Murat Ayber

11:30–11:45

### On the Implications of $|U_{\mu i}| = |U_{\tau i}|$ in the Canonical Seesaw Mechanism

**Speaker**  
Jianlong Lu

11:45–12:00

### MicroBooNE's Search for Anomalous Single-Photon Production

**Speaker**  
Xiao Luo

12:00–12:15

### Highlights of nucleon decay searches at JUNO

**Speaker**  
Yuyi Wang

12:30

14:30

## Neutrino Physics: BSM and ESSvSB+

**Session** | **Location:** Panorama | **Convener:** Juan Pedro Ochoa Ricoux

14:30–14:45

### An Improved Search for Unstable Sterile Neutrinos at IceCube

**Speaker**  
Philip Weigel

14:45–15:00

### First measurement of light sterile neutrino mixing parameters with KM3NeT/ORCA

**Speaker**  
Louis Bailly-Salins

15:00–15:15

### First results from the SoLid experiment at BR2

**Speaker**  
Frédéric YERMIA

15:15–15:30

### Probing Physics Beyond the Neutrino Mass at the KATRIN Experiment

**Speaker**  
Caroline Fengler

15:30–15:45

### Constraining new physics with Coherent Elastic Neutrino-Nucleus Scattering experiments.

**Speaker**  
Gonzalo Sanchez Garcia

15:45–16:00

### The European Spallation Source neutrino Super Beam plus (ESSvSB+) Project

**Speaker**  
Alessio Giaretta

16:15

16:45

## Neutrino Physics: New Tech

Session | Location: Panorama | Convener: Callum David Wilkinson

16:45-17:00

### Final design of the ENUBET monitored neutrino beam and its implementation at CERN

**Speaker**

Anselmo Mereaglia

17:00-17:15

### Overview and Status of the 2x2 NDLaR Demonstrator: A Pixel-Based LArTPC Prototype for the DUNE Near Detector

**Speaker**

Karolina Wresilo

17:15-17:30

### Prototyping the SoLaR LArTPC Technology for Detecting MeV-Scale Neutrinos

**Speaker**

Richard Diurba

17:30-17:45

### CLOUD: the first reactor antineutrino experiment using the novel LiquidO detection technology

**Speaker**

Diana Navas

17:45-18:00

### SuperChooz Pathfinder

**Speaker**

Dr Anatael CABRERA

18:00-18:15

### Status and Prospects of the Water Cherenkov Test Experiment (WCTE)

**Speaker**

Diego Costas Rodriguez

18:15-18:30

### Research and Development of Jinping Neutrino Experiment

**Speaker**

Wentai Luo

18:32